Fact Sheet
September 2004

Draft Permit Available for Comments

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

LAWRENCE BERKELEY NATIONAL LABORATORY

The California Department of Toxic Substances Control (DTSC) is providing this fact sheet to inform you about the status of the Lawrence Berkeley National Laboratory permit renewal application to operate a hazardous waste facility. On October 31, 2003 Lawrence Berkeley Laboratory (Berkeley Lab) submitted its application to renew a permit to store and treat hazardous waste at its Hazardous Waste Handling Facility. After review of this application, we have prepared a draft permit which, if approved, would allow the Lab to continue storing and treating hazardous waste.

DTSC invites you to review this draft permit and give us your comments. We also invite you to attend our public hearing. At this hearing we will give a presentation on the draft permit and receive comments from the public. You can submit your comments on the draft permit at the hearing or by sending them in writing to the DTSC project manager between September 21 and November 19, 2004. More details about the hearing and how to submit written comments are listed below and on page 4.

Comment Period
September 21 through November 19, 2004

The Draft Hazardous Waste Facility Permit is available at several locations for public review. See pg 4 for addresses and details on how to submit public comments.

Public Hearing

DTSC will hold a public hearing to share information with the community and to accept public comments on:

DATE:	October 20, 2004
TIME:	6:30 pm
PLACE:	North Berkeley Senior Center 1901 Hearst Street Berkeley, Ca. 94709

Contact Nathan Schumacher, Public Participation Specialist, for information on accessibility and to request reasonable accomodations. Please call at: (866) 495-5651 toll-free or by email at nschumac@dtsc.ca.gov by October 13, 2004.

DTSC is one of six Boards and Departments within the California Environmental Protection Agency. The Department's mission is to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

State of California

California Environmental Protection Agency

Hazardous Waste Handling Facility (Bldg 85)

BERKELEY LAB IS LOCATED NEXT TO UC BERKELEY

Berkeley Lab is a multidisciplinary research facility managed by the U.S. Dept. of Energy (DOE) and operated by the University of California (UC). A wide range of research is conducted at the Lab, including high-energy physics, accelerator research and development, materials research, and chemistry, geology, molecular biology and biomedical research. The Lab is located at One Cyclotron Road and consists of approximately 200 acres of land on the hillside area above of the UC Berkeley campus, 10 miles east of San Francisco. Most of the Lab is located within the city of Berkeley, a university and residential community, with the remaining part located in the city of Oakland.

HAZARDOUS WASTE FROM BERKELEY LAB IS SENT TO THE HWHF

Hazardous wastes are generated by various research and support operations at the Lab. These wastes are sent to the Hazardous Waste Handling Facility (HWHF) for treatment or temporary storage. The HWHF consists of one three-story building (Building 85), five prefabricated outdoor storage units, one three-sided sheet metal storage shed, and one outdoor prefabricated storage and treatment unit. It is currently permitted to receive hazardous waste and mixed waste. (Mixed waste is waste that is regulated as hazardous waste and contains low levels of radioactivity.) From the HWHF, hazardous waste and mixed waste are shipped to authorized off-site treatment, storage, disposal, or recycling facilities.

Examples of hazardous wastes managed at Berkeley Lab include corrosive liquids, solvents, oils, coolants, aqueous chemical solutions, contaminated soil, motor vehicle batteries, metal sludges, polychlorinated biphenyls (PCBs) and PCB-contaminated equipment, mercury wastes, oily rags, latex and oil-based paint materials, and spent activated carbon.

In April 1997, Building 85 began operations as the HWHF, replacing a former permitted HWHF at another location (Building 75, which is now closed). The permit to store and treat waste at the HWHF must be renewed every ten years. It was originally granted in 1983, authorized again in 1993, and is currently being considered for another authorization. Because Berkeley Lab submitted a timely renewal application, 180 days prior to the expiration of its 1993 permit, the HWHF is currently operating under the 1993 permit's terms and conditions while the new permit application is being considered. If granted, the draft permit would allow specified activities through 2014.

SOME WASTES ARE TREATED AT THE HWHF BEFORE TRANSPORT

The Berkeley Lab treats some wastes sent to the HWHF to either make them non-hazardous or to make them more stable and suitable for transportation to an appropriate disposal facility. They use treatment methods on material up to five gallons in quantity. The Berkeley Lab needs a permit in order to continue these treatment activities at the HWHF. See Table 1 on Page 5 for a complete list of treatment methods and their descriptions.

THE PERMIT APPLICATION DOES NOT REQUEST MANY CHANGES

The permit application submitted by Berkeley Lab does not request structural changes to the facility, capacity changes of storage and treatment for the permitted units, or changes to the currently approved treatment methods. The total maximum permitted storage capacity of both hazardous and mixed wastes at the facility will remain 23,320 gallons. The total maximum treatment capacity of the facility will remain 1,158 gallons per day. The maximum daily treatment capacity ranges between 72 to 550 gallons for each waste, depending on the treatment method. The daily treatment capacities will not change.

The changes requested in the permit application are:

- Reduce the categories of wastes by eliminating categories that described similar waste.
- Update the quality assurance procedures for particular wastes.
- Change the identification and numbering system for particular wastes to be more efficient.
- Add one new waste stream, Oxidizer Solids, to the list of hazardous waste.
- Update administrative information such as internal forms, facility maps, and supply tables.

DTSC EVALUATED THE ENVIRONMENTAL EFFECTS OF PROPOSED PERMIT

The California Environmental Quality Act (CEQA) requires that we analyze any environmental effects caused by granting the proposed permit. This analysis was most recently conducted in May 1997, in a document called a Mitigated Negative Declaration, prepared and approved by the UC Regents. We reviewed this and other documents, such as the 1997 Facility Safety Analysis Document, which evaluates risk to both workers at Berkeley Lab and to the general public beyond the Lab's fence line based on hypothetical accident scenarios. The UC Regents prepared a Notice of Exemption (NOE), which states that this draft permit is exempt from CEQA and has no significant adverse impacts on the environment. We have reviewed all documents and agree with the NOE.

THE LAB CONTINUES CLEANUP OF PAST RELEASES

In addition to our role in permitting current activities at Berkeley Lab, DTSC also oversees the cleanup of contamination associated with past activities. This process of identifying where chemical spills or "releases" occurred, how much contamination is in soil or groundwater, and how it should be cleaned is called "Corrective Action." The Corrective Action process is separate from permitting activities like the current HWHF permit. The following is a brief summary of the status of the Corrective Action process. A more detailed history can be found at DTSC's website, www.dtsc.ca.gov/HazardousWaste/LBNL/index.html.

DTSC has indentifed a total of 174 areas where hazardous materials may have been released at Berkeley Lab. Eight of these 174 areas have radiological contamination. The U.S. Department of Energy, which has sole jurisdiction over radiological cleanup, oversees the cleanup of these eight locations. DTSC oversees the cleanup of the remaining 166 areas. After investigating, we concluded that it is necessary to study further the clean up of 45 of the 166 locations. At the remaining 122 locations, levels of contamination were either not found or was not high enough to warrant further action and are not considered a threat to health or the environment.

WE INSPECT TO MAKE SURE THE LAB FOLLOWS THE PERMIT

For the annual inspections for the years 2000 through 2003, DTSC has either found no violations or minor violations that were corrected in a timely manner. These violations did not result in any enforcement actions.

WE ARE INTERESTED IN YOUR CONCERNS

DTSC recently mailed a survey to the community neighboring the Lab. We received many surveys back from the public, some of which list specific concerns. We have categorized these concerns and have created a fact sheet that gives more information specific to these concerns. This fact sheet is available on our website at www.dtsc.ca.gov/HazardousWaste/LBNL/index.html. If you are unable to access this information, please contact Nathan Schumacher toll-free, at (866) 495-5651.

YOU CAN PARTICIPATE IN OUR PERMITTING ACTIVITIES

DTSC will hold a 60-day public comment period on the draft Hazardous Waste Facility Permit. You can review the draft permit and permit application at the following information repositories:

Berkeley Public Library
2090 Kittredge Street
Berkeley, CA 94702
(510) 981-6100

LBNL Building 50 Library
1 Cyclotron Road
Berkeley, CA 94720
(510) 486-5621

The full administrative record is available at:

DTSC Berkeley Office
700 Heinz Ave., Suite 200
Berkeley, CA 94710

Please make an appointment with Lule Varela at (510) 540-3800.

You can send written comments to us between September 21 and November 19, 2004 in the following ways:

- Mail written comments to:
  Dr. Waqar Ahmad, Project Manager
  Department of Toxic Substances Control
  700 Heinz Avenue, Suite 200
  Berkeley, California 94710
- Send your comment by e-mail to:
  wahmad@dtsc.ca.gov or
- Submit oral comments at our hearing on October 20th at 6:30 pm at:

  North Berkeley Senior Center
  1901 Hearst Street
  Berkeley, CA 94709 (510) 981-5190

DTSC will make the final decision on the Hazardous Waste Facility Permit only after public comments have been received and considered. DTSC will also write a response to comments it has received. A copy of our response to all comments will be mailed to each person who submitted comments, will be kept in the repositories, and a copy will be posted on our website.

YOU CAN CONTACT US IF YOU HAVE FURTHER QUESTIONS

If you have any questions or concerns please contact the following staff:

Dr. Waqar Ahmad, Project Manager
700 Heinz Avenue, Suite 200
Berkeley, CA 94710
(510) 540-3932 or Wahmad@dtsc.ca.gov

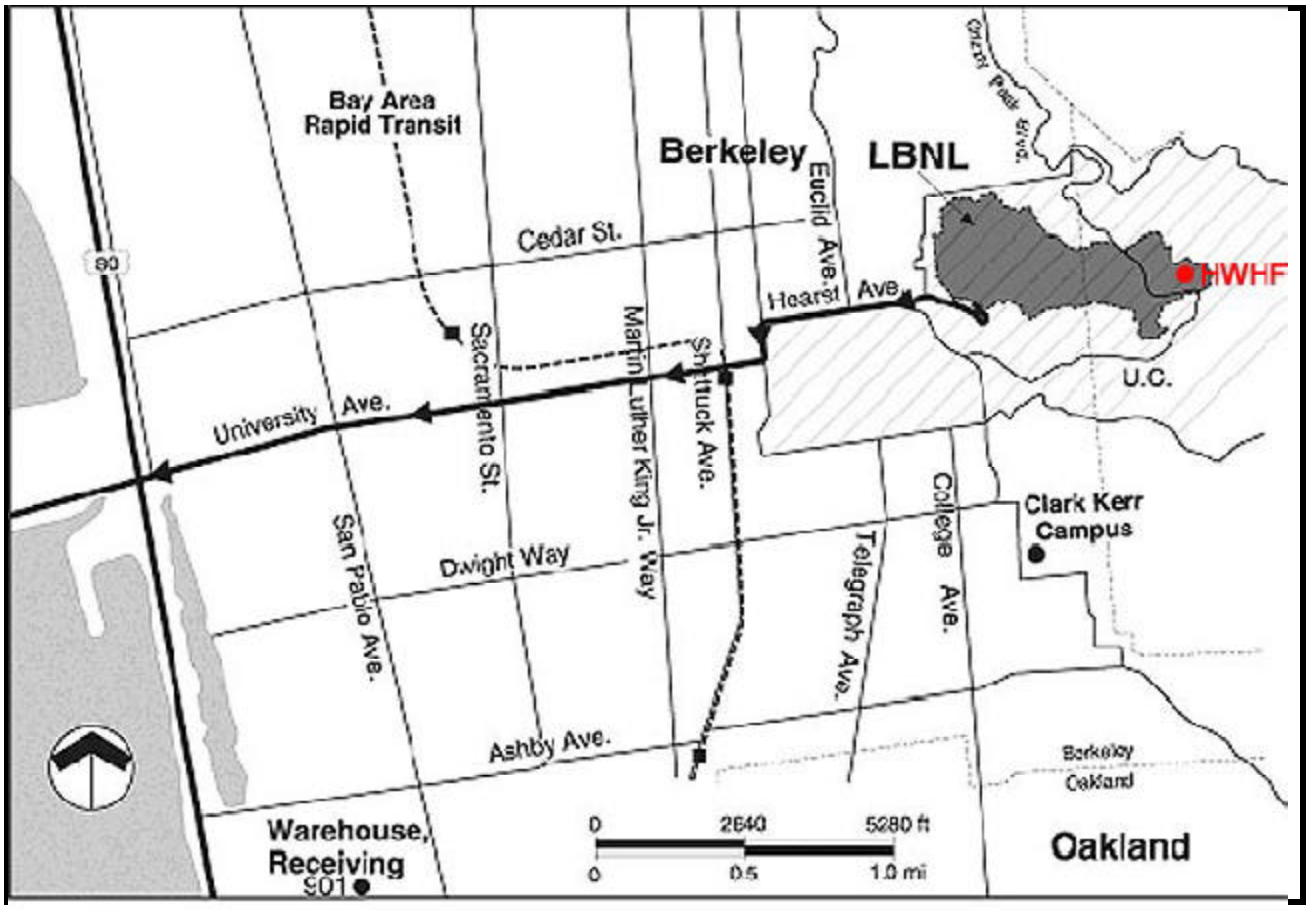
Nathan Schumacher, Public Participation Specialist
8800 Cal Center Drive
Sacramento, CA 95826
Toll-free (866) 495-5651 or
Nschumac@dtsc.ca.gov

For media inquiries, please contact:
Angela Blanchette, Public Information Officer
700 Heinz Avenue, Suite 200
Berkeley, CA 94710
(510) 540-3732 or Ablanche@dtsc.ca.gov

TABLE 1 Treatment Activities at the HWHF

The following activities are done at the Hazardous Waste Handling Facility (HWHF) and are regulated by the Department of Toxic Substances Control

Consolidation	Collecting similar wastes into a single container and compacting them together
Neutralization	Adding a chemical to make a waste less acidic or basic
Solidification	Adding a cement-like material to a liquid to make the whole waste solidify together
Desensitization	Adding a chemical to a waste to make it more stable
Ultraviolet (UV)/Ozone and UV/peroxide oxidation	Adding oxygen to a waste to make it more stable. Using ultra-violet rays often aids this process
Reduction of oxidizers	Removing oxygen from a waste to make it more stable
Air stripping of volatile organic compounds from dilute liquid solutions	Blowing air into a waste to cause some chemicals to rise as vapors and separate from the liquid solution
Absorption	Using a solid material to soak up a liquid waste
Adsorption	Adhering a chemical to the surface of another substance
Ion exchange	Making a waste more stable by adding or taking away an ion
Metallic replacement	Making chemicals react where one metal displaces another in a solution
Plating of metals on an electrode	Sending an electrical current through positive and negative electrodes causing metals to deposit on them
Evaporation	Letting a chemical change from a liquid to a gas
Distillation of organics from dilute liquid solutions	Heating solutions to drive off organic vapors from water solutions
Rinsing of empty containers	Removing material from a container using water
Mixing of multi-component resins	Mixing together solid and semi-solid materials



Lawrence Berkeley Laboratory with Hazardous Waste Handling Facility Location

Mailing List

If you did not receive this notice in the mail and would like to be put on the mailing list, please contact Nathan Schumacher by phone at (866) 495-5651 or by email at Nschumac@dtsc.ca.gov or by mail at:

Department of Toxic Substances Control
Attn: Nathan Schumacher
8800 Cal Center Drive
Sacramento, CA 95826

Notice to Hearing Impaired Individuals:

TDD users can obtain additional information about the Berkeley Lab site by using the California Relay Service (1-888-877-5378) to reach Nathan Schumacher at (866) 495-5651